

April 25, 2022

ADEQ Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Ms. Alyxandra Rich

Subject: Weekly Monitoring Report for Week Ending 4/16/2022
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 101704, LTF 88973

Dear Ms. Rich:

Florence Copper is submitting this report in accordance with Table 15 of Aquifer Protection Permit (APP) No. 101704.

This report includes In-Situ Best Available Demonstrated Control Technology (BADCT) compliance monitoring that is required to be reported on a weekly basis including:

- Recovered volume to injection volume;
- Inward hydraulic gradient; and
- Maximum injection pressure.

A map showing the location of the PTF injection, recovery, and observation wells is included as Figure 1.

Recovered Volume to Injection Volume

A summary of the injected and recovered volumes for the week of 4/10/2022 to 4/16/2022 is included in Table 1. Observation Wells O-02 and O-03 were pumped as part of the recovered volumes. Recovery Well R-09 was used as an injection well on 4/10/2022 to 4/11/2022. The total injected and recovered volumes, as well as the percent recoveries, are presented on Figure 2.

During the reporting period no exceedance of the alert level was measured for recovered volume to injected volume percent recovery.

Inward Hydraulic Gradient

Table 2 includes a summary of water levels in the recovery and observation well pairs, and the difference in head measurements. Recovery Well R-07 was down for redevelopment on 4/10/2022. Recovery Well R-03 was down for redevelopment on 4/12/2022 to 4/16/2022.

Hydrographs showing the water level elevation comparisons for each recovery well and observation well pair are included in Figure 3.

During the reporting period, there were no exceedances of the alert level for the daily average water level comparisons for the inward hydraulic gradient.

Injection Pressure

A summary of the injection pressures during the reporting period is included in Table 3. During the reporting period no alert levels were exceeded for the daily maximum injection pressure.

Please contact me at 520-374-3984 if you require any additional information.

Sincerely,
Florence Copper Inc.



Brent Berg
General Manager

Attachments:

Tables and Figures

cc: Daniel Reeder, ADEQ
Nancy Rumrill, United States Environmental Protection Agency

TABLES

Table 1. Injected and recovered volumes (gallons) for the week of 4/10/2022 to 4/16/2022

Date	Daily Injection Flow (gal)	Daily Recovery Flow (gal)	% Recovery	AL % Recovery Less than
4/10/2022	144800	307000	212	106
4/11/2022	144700	358700	248	106
4/12/2022	141800	341300	241	106
4/13/2022	142600	350600	246	106
4/14/2022	141600	320800	227	106
4/15/2022	141700	325500	230	106
4/16/2022	141900	340200	240	106
Weekly Average	142729	334871	235	106
Avg Flow Rate (gpm)	99	233		

Table 2. Average daily water levels in the recovery and observation well pairs (amsl)

Well Pairs Average Daily Elevation & Gradient (feet)														
Well Pairs	4/10/22		4/11/22		4/12/22		4/13/22		4/14/22		4/15/22		4/16/22	
Well	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient
R-01	1217.04		1212.47		1210.93		1209.70		1214.21		1214.36		1212.32	
O-01	1220.54	3.50	1214.58	2.11	1212.62	1.69	1213.22	3.52	1215.87	1.67	1215.64	1.28	1214.26	1.94
O-07	1227.37	10.33	1221.77	9.30	1220.17	9.24	1219.80	10.10	1222.02	7.81	1221.84	7.48	1220.29	7.97
R-02	1187.12		1187.12		1167.82		1167.04		1168.88		1167.83		1166.80	
O-01	1220.54	33.42	1214.58	27.46	1212.62	44.80	1213.22	46.17	1215.87	47.00	1215.64	47.81	1214.26	47.46
O-02	1218.05	30.93	1218.05	30.93	1210.33	42.51	1212.05	45.01	1215.17	46.30	1212.51	44.68	1212.57	45.77
R-03	1053.50		1089.43											
O-02	1218.05	164.55	1218.05	128.62	1210.33		1212.05		1215.17		1212.51		1212.57	
O-03	1201.26	147.75	1197.88	108.45	1202.01		1200.12		1204.74		1203.56		1200.15	
R-04	1096.14		1099.18		1097.45		1099.92		1102.81		1101.91		1101.06	
O-03	1201.26	105.12	1197.88	98.70	1202.01	104.56	1200.12	100.20	1204.74	101.93	1203.56	101.65	1200.15	99.09
R-05	1075.14		1075.14		1184.47		1183.17		1185.35		1182.14		1180.29	
O-04	1228.46	153.32	1224.41	149.27	1223.67	39.19	1223.17	40.01	1224.88	39.53	1224.56	42.42	1222.86	42.57
R-06	1165.71		1165.77		1160.83		1159.04		1169.13		1168.77		1167.04	
O-04	1228.46	62.75	1224.41	58.64	1223.67	62.84	1223.17	64.14	1224.88	55.76	1224.56	55.79	1222.86	55.82
O-05	1228.86	63.14	1224.12	58.35	1222.55	61.72	1222.21	63.17	1223.97	54.85	1223.78	55.01	1222.12	55.08
R-07			1216.61		1218.15		1218.00		1219.89		1219.73		1218.13	
O-05	1228.86		1224.12	7.51	1222.55	4.40	1222.21	4.21	1223.97	4.08	1223.78	4.05	1222.12	3.99
O-06	1227.89		1222.34	5.73	1220.31	2.17	1220.05	2.05	1221.97	2.08	1221.85	2.12	1220.24	2.11
R-08	1217.42		1211.21		1208.59		1209.07		1211.14		1211.03		1209.47	
O-06	1227.89	10.47	1222.34	11.14	1220.31	11.72	1220.05	10.98	1221.97	10.84	1221.85	10.82	1220.24	10.77
O-07	1227.37	9.96	1221.77	10.56	1220.17	11.57	1219.80	10.73	1222.02	10.89	1221.84	10.81	1220.29	10.82
Alert level is exceeded if gradient is less than 1 foot.														
Recovery Well R-07 was down for redevelopment on 4/10/2022. Recovery Well R-03 was down for redevelopment on 4/12/2022 to 4/16/2022.														

Table 3. Injection well pressures (psi)

Date	I-01			I-02			I-03			I-04			R-09			AL Max Inj Pressure
	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	
4/10/2022	0.04	0.03	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	113
4/11/2022	0.05	0.03	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	19.3	0	76	113
4/12/2022	0.06	0.03	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				113
4/13/2022	0.06	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				113
4/14/2022	0.05	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				113
4/15/2022	0.05	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				113
4/16/2022	0.05	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				113

FIGURES

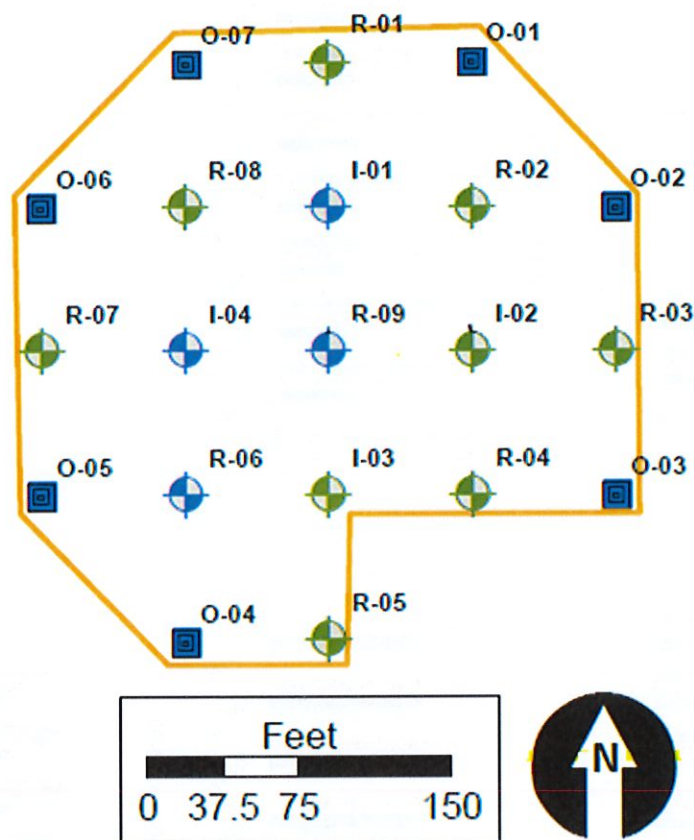


Figure 1. PTF injection, recovery, and observation well locations

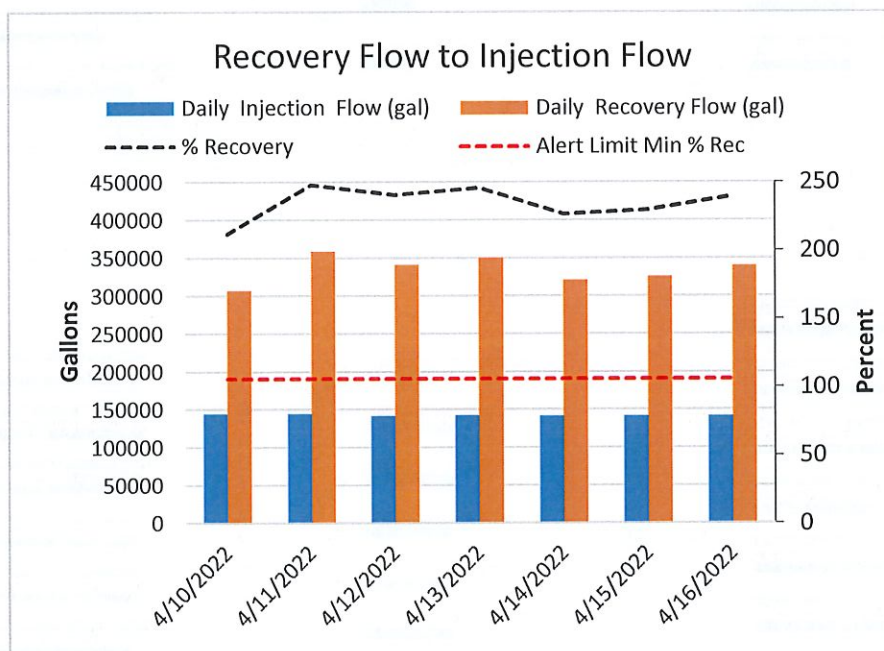


Figure 2. Recovered volume to injected volume

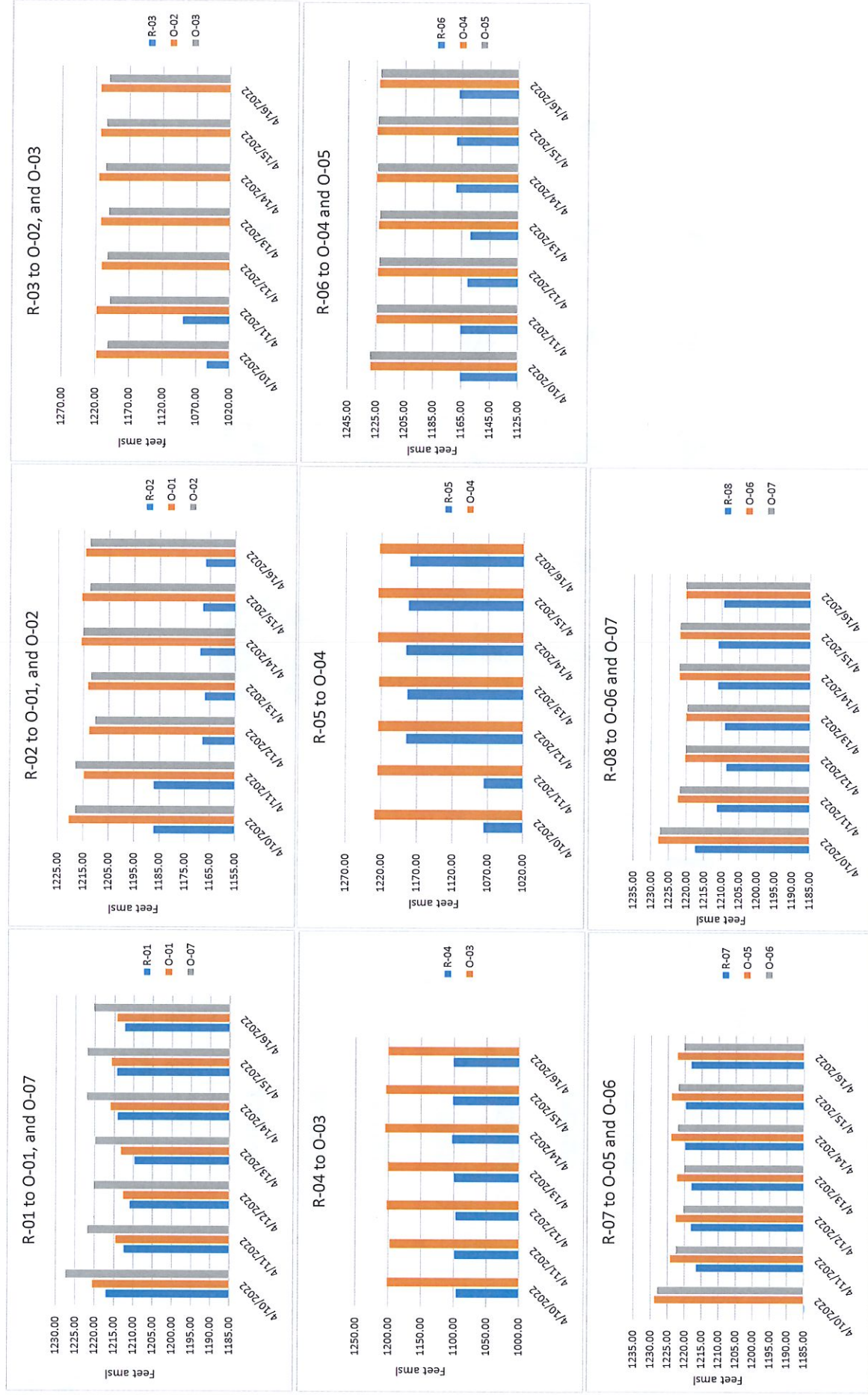


Figure 3. Recovery and observation well pairs. Recovery Well R-07 was down for redevelopment on 4/10/2022. Recovery Well R-03 was down for redevelopment on 4/12/2022 to 4/16/2022.